



2012 - 2013 Field Project Summary

Western Arctic Caribou Herd (WAH) Collaring Project: 2012

Each year, Alaska Department of Fish & Game (ADF&G) deploys radio collars on 20-40 caribou and collects blood samples from live caribou that are then released. The caribou are captured using boats and physical restraint. The calves of captured cows are weighed and released together. At least once every 3-5 years, 10 caribou are euthanized to collect tissue samples to assess health and body condition. In addition, each year 6-8 middle and high school students from 2 schools within range of this herd participate in the project for educational purposes. ADF&G bases work out of Gidding's cabin at Onion Portage in the Noatak National Park and Preserve.

Project Lead: Jim Dau, ADF&G Biologist

Arctic Network (ARCN) Lagoon Vital Sign

The Arctic Network (ARCN) Inventory and Monitoring Program monitors specific vital signs in the 5 northern Alaska park units, including the coastal lagoons of Cape Krusenstern (CAKR) and Bering Land Bridge (BELA). Coastal lagoons are critically important ecosystems for wildlife and subsistence practices in the region and are vulnerable to both climatic change and industrial development.

The logistics of visiting multiple coastal lagoons, the distances that must be traveled, and the challenges of collecting quality information in a diverse set of lagoons that change throughout the seasons make monitoring these water bodies very difficult.



Local youth work with ADF&G to capture and radio collar caribou at Onion Portage. Photo courtesy of Geoff Carroll - ADF&G.

In order to understand the status of Park resources in a rapidly changing environment, and to mitigate threats of climate change and development, the Arctic Network collaborates with the Wildlife Conservation Society (WCS) to gather baseline information and monitor lagoons in CAKR and BELA.

Currently, biologists from the NPS and the WCS are in the process of assessing results of analyses on water samples (e.g., chlorophyll) and biological samples (e.g., fish) collected in late July 2012 from 2 lagoons in BELA and 3 in CAKR. This data will continue to develop a strong baseline of conditions in these lagoons and be compared to results from previous efforts. A report on this project will be available in spring 2013. The information gathered from this field effort will be beneficial for NPS land managers as well as land management agencies elsewhere in Alaska. The project also aims to work more closely with local residents to ensure that the

information collected is presented in a manner that is useful for them. Project Lead: Stacia Backensto, NPS.

Lake and Permafrost Dynamics

This project focuses on the dynamics of lake habitat change in major lake districts of the Western Alaska LCC (WA LCC) region in relation to permafrost change. Spatial information is used by land, resource, and wildlife managers, as well as local communities in western Alaska.

The project will focus on 3 tasks:

1. Determine historical lake loss or gain in key lake districts in the WA LCC region from 1950-2010 using medium and fine resolution remote sensing.
2. Investigate causes of lake loss such as catastrophic drainage or drying using remote sensing and field surveys.
3. Expand the knowledge on permafrost and its impact on lake stability in a wide variety of landscape types of the WA LCC using ground data and predictive one-dimensional permafrost modeling for specific landscape types and driven by climate predictions from the Scenario Network for Alaska Planning (SNAP).

All data produced within this project will be provided to the LCC directly and made accessible to the public online at the completion of the project.

Project Lead: Buido Brosse, U of A Fairbanks

ShoreZone

ShoreZone is a coastal habitat mapping project that characterizes the physical and biological resources of the shoreline during low-tidal ranges. The project uses aerial data, GIS data, and a searchable database that provides a baseline for damage assessments, oil spill planning and response operations, habitat mapping, coastal development planning, species vulnerability with climate change, and coastal erosion monitoring. The gathered shoreline data will be served via the web and ArcMap Geodatabases.





Shallow lake monitoring site. Photo courtesy of ARCN.

The ShoreZone project is particularly important because of the recent increase in gas and oil exploration in the Chukchi Sea. This increase is due to the lifting of a 30-year moratorium on outer-continental shelf oil and gas development, and allows the placement of drill rigs as close as 170 miles from the coasts of Bering Land Bridge National Preserve (BELA) and Cape Krusenstern National Monument (CAKR). Therefore, the project will aid in providing a baseline data layer of sensitive habitats and species that would be affected by this activity.

In 2012, multi-agency funding was given to Coastal and Ocean Resources (CORI) of B.C., Canada, to acquire high resolution images and videos of the entire coastline from Point Hope to Wales. These are now available online at <http://mapping.fakr.noaa.gov/szfex/>. GIS mapping of biota and such physical properties as sediment type, wave energy and oil residency index will be completed in 2013. The park contact for this is Peter Neitlich, WEAR Ecologist.

Shallow Lake Monitoring Project

Shallow Lake Monitoring Project is part of the Arctic Network (ARN) vital signs monitoring program. Park vital signs are considered to be physical, chemical, and biological elements and processes of park ecosystems that represent the

overall health or condition of the park. Signs that will be monitored include water quantity and quality, vegetation, and macroinvertebrates, which were chosen because they are essential to the maintenance of these poorly understood ecosystems. In addition, evidence has shown that lakes are disappearing throughout Alaska likely due to permafrost degradation and subsequent water loss to groundwater.

In summer 2012, ARCN sampled 99 lakes in Bering Land Bridge National Preserve. The crew collected water samples, mapped permafrost degradation, mapped the lake morphometry, and vegetation composition. This information will be used in combination with remote sensed imagery to determine the condition of shallow lake ecosystems.

In general several recently drained lakes and many lakes with extensive permafrost degradation were observed. Much of the permafrost degradation observed was in Yedoma, a type of ice-rich permafrost that developed during the Pleistocene. This sediment was deposited as the ice developed and is very rich in nutrients and carbon. So when this ice melts and the sediment is dumped into the lake, there are a lot of nutrients dumped into the lakes as well. The crew observed large algal blooms, insect hatches and large groups of waterbirds on lakes that have recently had major

slumps. It was within this frozen ground that the remains of an over 12,000 year old mammoth were also discovered over the summer. project lead: Amy Larsen, ARCN, NPS.

2012 Mammoth Discovery

A one-day reconnaissance was conducted in Bering Land Bridge National Preserve at the site of a mammoth bone discovery in summer 2012. The initial find was made by aquatic ecologists working in the preserve on the Shallow Lake Monitoring Project. The original discovery consisted of large mammoth leg bones and a tooth partially submerged at the edge of a lake. Most unusual about this find is that it contained multiple bones from what appeared to be a single mammoth. Some of the leg bones, for example, were found very close to their anatomical position. This is rare in Alaska and indicated that there was good research potential at this site--perhaps the remains of an entire mammoth.

A radiocarbon date was also run on a small sample from the initial find and showed the mammoth to have died about 12,400 years ago at the very end of the Pleistocene. It is also one of the younger mammoths known from Alaska from a time just before the species became extinct on the mainland (some mammoths survived for several thousand more years on islands in the Bering and Chukchi seas). The young date for the mammoth also meant there was a possibility that the mammoth was a victim of human hunters.

Work in 2012 sought to follow up on some of these questions, to assess the research prospects for the site, and to determine if any emergency protection of the find was needed. It was confirmed that there were indeed multiple bones from one mammoth, but could not be determined how much of the skeleton was present due to high water. No evidence was found for human hunting, but the possibility remains. A geological reconnaissance in the area was also conducted in order to plan further research into the paleoenvironmental setting, and to learn how this skeleton was deposited in this location. PI: Jeff Rasic, NPS.



Mammoth leg bones discovered. Photo courtesy of Jeff Rasic, NPS.

2012 Fuel Tank Replacement and Fuel Contamination Investigation Project at Backcountry Cabins

For many years the shelter cabins at Ear Mountain, Grayling Creek, Nuluk and Cottonwood Creek and the Serpentine Hot Springs bunkhouse had fuel tanks consisting of 55 gallon drums that were deemed unsuitable because they were not vented and were hazardous to refill. In 2012, a contract was awarded to Ahtna Engineering to construct and install new tanks and piping at each location (except for Cottonwood Creek because of its status as a historic cabin). The custom fabricated fuel tanks were designed to be easier to refill, well-vented, well-secured, light, and durable. They were installed in July 2012.

In addition to the replacement of the drums with the new tank systems, Ahtna was also tasked with investigating the fuel contamination from the releases over the years.

- *Nuluk and Grayling Creek:* Soil test results showed no significant contamination, and no further action will be taken.
- *Ear Mountain and Goodhope Cabin:* Diesel contamination was above acceptable levels; soil was turned over and fertilizer added to encourage bacterial degradation of the contamination.
- *Cottonwood:* The fuel tank appeared to have been overturned and damaged by a bear, and the surrounding soil was contaminated with diesel. Because the groundwater is likely shallow in this area and the site is near the creek, further sampling of soil to determine the effectiveness of the remedial action and sampling of water in the creek was recommended.
- *Serpentine Hot Springs:* Limited contamination was found around the airstrip and in the groundwater near the bunkhouse, likely from old fuel lines. Ahtna recommends excavating more test pits to determine the extent of groundwater contamination. Depending on funding in 2013, a NPS crew will remove the

plywood on the floor under the former routing of the fuel lines in the bunkhouse and Ahtna will remove as much contaminated soil as possible.

project leader: Bill Heubner, NPS

Iyat Traditional Cultural Property Designation Project

The Serpentine Hot Springs Traditional Cultural Property (TCP) Project acquired precise boundaries and photographic documentation within the Iyat area to serve as an example for other recognized TCPs in Alaska. This last summer a small crew of cultural resources staffed camped at Serpentine and collected the information that was needed for a TCP application. After a public meeting in Shishmaref, comments and information from village residents were gathered during the spring and summer of 2012. In fall 2012, a TCP application was drafted and is under review by park staff. The Project Investigator is Heather Miller, NPS Alaska Regional Office.

Cultural Resources Overview and Assessment for Serpentine Hot Springs

Kim Fleming of the University of Alaska Fairbanks conducted research and synthesized data collected by herself and former project investigator (PI) Richard O. Stern to complete a document summarizing the history of human use at Serpentine Hot Springs. This overview includes archeological, historical, and ethnographic data to assist park management in making informed decisions regarding development and planning efforts.

Monitoring for Yellow-billed Loon Contaminant Burdens in Cape Krusenstern National Monument and Bering Land Bridge National Preserve

The yellow-billed loon (YBLO, *Gavia adamsii*) is an international species of concern with a global population estimated at 16,650-21,000. Approximately 20-25% of this population occurs in Alaska, including areas of Cape Krusenstern



Filling the new tank at Serpentine Hot Springs. Photo courtesy of Ahtna Environmental, Inc.

National Monument (CAKR) and Bering Land Bridge National Preserve (BELA). The entire US population of YBLO seasonally occurs in Alaska, where the total summer breeding population is estimated at 3,700-4,900 birds. The species' life history characteristics, low reproductive rate and success, slow rate of sexual maturity and reproduction, small population size, and restricted distribution, combined with unsustainable levels add to the vulnerability of this species.

Because these loons are long-lived and return to the same breeding sites each year, they are ideal for monitoring long-term trends in density and distribution, as well as for their consumption of contaminants through their diets.

The objectives for ARCN's monitoring of the western Alaska YBLO population include:

- Aerial surveys of population occupancy and density.
- Assessment of contaminants including metals,

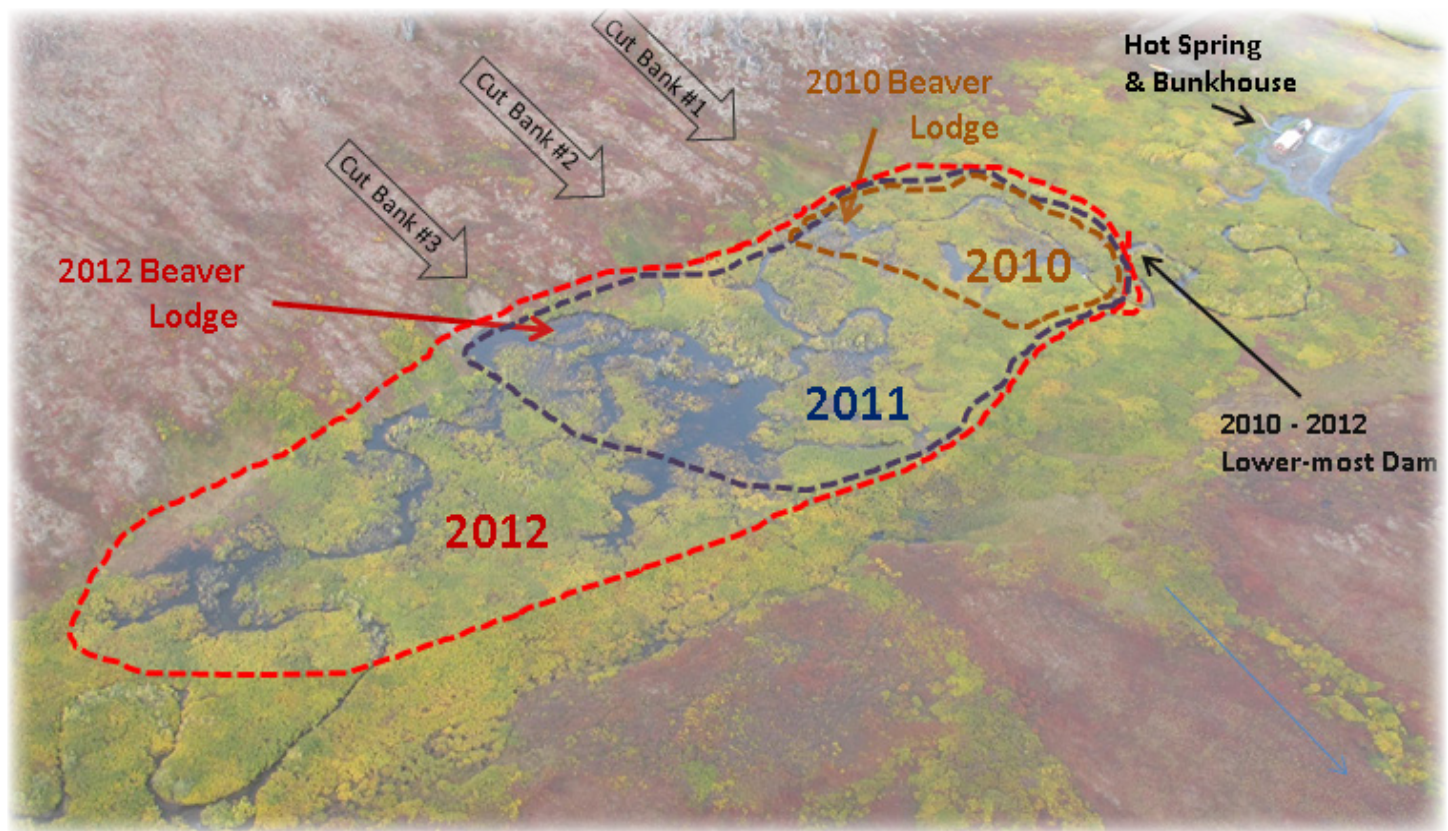
persistent organic pollutants, pesticides, and other harmful chemicals.

In June 2012, ARCN collaborated with Dr. Angela Matz at the U.S. Fish and Wildlife Service (USFWS) Ecological Contaminants Program to opportunistically collect eggs from 13 different YBLO nests across BELA. Minnow traps were set at 12 of the 13 YBLO nest lakes where egg collection occurred and at additional YBLO nesting and fishing sites across BELA and CAKR. Opportunistic DNA sampling across BELA and CAKR, including the egg-collection sites and other YBLO fishing and nesting sites was also conducted during nest visits. Contaminants samples will be analyzed by USFWS Environmental Contaminants Program.

The YBLO egg and minnow samples from BELA and CAKR will be compared to similar data collected from the Arctic Coastal Plain in Alaska. This will establish baseline levels of contaminant burdens occurring in the species across its range in Alaska. The contact for this project is Melanie Flamme, NPS.



The crew prepares to sample a lake. Photo courtesy of Melanie Flamme - NPS/USFWS



Annual increase in beaver activity upstream of Serpentine Hot Springs, 2010 – 2012.

Serpentine Water Quality and Stream Ecology

This project began in 2010 as a collaborative effort between NPS, USGS and Montana State University to understand the geochemistry, microbiology and water quality of Serpentine Hot Springs and Hot Springs Creek. The NPS has taken over ongoing monitoring associated with this project.

Three data loggers are installed in Hot Springs Creek to monitor water temperature, conductivity and stream velocity. A data logger is also installed in the main outdoor hot pool at the cabin to continuously monitor water temperature. Water quality samples are collected and analyzed annually.

Based on these results, and due to the presence of beaver upstream of the cabin, the NPS continues to advise that drinking water be treated or boiled prior to consumption. The contact for this project is Linda Hasselbach, NPS WEAR.

Serpentine Beaver Colonization

A visual estimate based on aerial photos indicates the area of beaver-induced flooding above the bunkhouse has increased 400 - 500% over a 3 year period ending in 2012. During that time, we estimate that 31-67% of the total stream flow was diverted from the main creek channel immediately above the bunkhouse. Stream diversion is primarily the result of numerous beaver dams pushing water into pools, and new and existing side channels. 100% of diverted stream flow re-enters the main creek channel at the bunkhouse site via: 1) the channel behind the bunkhouse, 2) the small channel(s) in the gravels just above the bunkhouse, and 3) as overland flow. A small amount (1-3 cfs) of additional discharge is added below the bunkhouse by Serpentine Hot Spring itself. The NPS is concerned that increased overland flow associated with continued beaver colony expansion will threaten the bunkhouse and bathhouse facilities. Management options will be discussed in January 2013. Project lead: Linda Hasselbach, NPS WEAR.

2012 Hazard Fuels Treatment

The NPS removed hazardous vegetative fuel (brush) that surrounds two Fairhaven Ditch Historical Cabins, numbers 2 and 3. Hazard fuels around these cabins consisted mostly of willow shrub, dwarf birch-tussock shrub, and sedge landscape cover types. Removal of this brush will enable firefighters to become more effective if the cabins need protection from wildfire since tall shrubs inhibit firefighters' ability to work around the cabin. All brush cut were ragged (tore up) and scattered out beyond 100' from each cabin, eliminating the need to burn piles at this site in the future. project lead: Larry Weddle, NPS.

Thermal Response of Lakes to Climate Change

The primary goal of this project is to provide land and resource managers with information related to the past, present, and future temperature trends in lake and lagoon surface waters in western Alaska.

Specifically, the project:

- Reconstructed summertime lake and lagoon surface temperature trends for waterbodies larger than 50 km² back to 1985, and larger than 10 km² back to 2001.
- Measures hourly lake temperatures in 50 waterbodies from summer 2012-2015.
- Develops a predictive model using relationships between in-situ data, remotely sensed data, and meteorological data to forecast lake and lagoon surface temperature trends out to 2025, 2050, and 2100.

Preliminary results from 2012:

- *In situ* observations for August 2012 from 17 lakes show that mean lake surface temperature was lower in the more northerly shallow lakes and more so in the deep lake when compared to lakes south of 66° N. All lakes responded to what appears to be a region-wide warming event during the middle of August which resulted in maximum lake surface temperatures in all cases except the three shallow northerly lakes.
- UAF masters student Terezka Bendlova finished

a thesis developing a hindcasting model for lakes located in the NW portion of the study region, with the aim to determine the number of years over a 25 year period for which lake temperatures exceeded 20°C. It was found that this occurred in almost half of the years.

- A related project is focused on observing ice-out patterns on large lakes, including the Yukon-Kuskokwim Delta and Bering Land Bridge National Preserve. Results from this project have allowed development of models to predict the timing of ice-out based on air temperature and lake morphometry.

Compiled data will be made available to the public. project lead: Ben Jones, USGS.

Nuluk and Kuzitrin Lake Cultural Resource



Studying the thermal response of lakes to climate change. Photo courtesy of Ben Jones, USGS



New bathhouse at Serpentine

Projects

In Bering Land Bridge National Preserve, WEAR Culture Resource (CR) staff will continue archaeological reconnaissance and limited evaluative testing at Kuzitrin Lake/Twin Calderas Archaeological District. In addition, CR staff will monitor the replacement of the the Serpentine Hot Springs bathhouse, to mitigate impacts derived from construction activities. The replacement is expected to take 4-5 weeks to complete. Fuel tank replacement and soil evaluation/treatment will also require CR monitoring during the treatment process.

The Nuluk Cultural Resources Assessment Project, also based in BELA, will take place mid-July through early-August and will focus on assessing the conditions of relocated archaeological sites previously recorded in NPS lands surrounding Ikpek Lagoon.

Project Lead: Shelby Anderson, Portland State University

Serpentine Hot Springs Bathhouse is OPEN!

Although not completely finished, the bathhouse is OPEN! The remodel project began late (end of September 2012) due to issues with receiving the materials. Though the project is not complete, the crew was able to complete most of the remodel, with only the qanichuck (arctic entry/changing room) needing completion. The park used treated lumber and other waterproof/resistant materials. The park hired 2 workers from Shishmaref in 2012. Work will begin again in the spring and summer of 2013.

Comparisons of Population Dynamics and Ecology of Muskox in and adjacent to Bering Land Bridge National Preserve and Cape Krusenstern National Monument

This project compares and contrasts muskox populations, calf births, adult female survival, sex/age structure, health and growth information between muskoxen of the northern Seward Peninsula and Cape Thompson populations. Field research for this project began in 2009 and will be completed in 2013. Layne Adams of the USGS, Joel Berger of the Wildlife Conservation Society, and NPS staff biologists Marci Johnson, Brad Shults, and Jim Lawler are conducting this project.

- Muskox were radio collared, fecal samples are being analyzed, and populations are being mapped.
- Approximately 30 collared females are being monitored in each of the two study areas. The collars gather accurate GPS locations every 4 hours and transfer the data weekly via satellite as well as emit a signal that allows researchers to locate the animals from the air to monitor their survival and document the size of the groups and number of calves.
- Though the capture effort focused on animals within BELA, many animals have since dispersed widely across the Seward Peninsula.
- The captures previously scheduled in March of each year are now complete and will not be done in 2013.
- Nearly all the collars were deployed with a device that is programmed to release in June of 2013. Radio-tracking will be conducted

by fixed-wing aircraft once monthly until the collars drop off, at which time a helicopter will be used to retrieve them.

- Joel Berger will be returning to the area (March-April 2013) by snowmachine to collect fecal samples and take photographs for estimating body mass.
- Dr. Adams would appreciate receiving jaws from harvested muskoxen with the front incisors intact.
- Upon the conclusion of the project a comprehensive report detailing laboratory, survival, and spatial analyses will be completed and relevant information will be shared with local communities.

project lead: Marci Johnson, NPS.

Grazing Enclosures Installed

Climate is considered to be the most important broad-scale factor influencing ecosystems. Because global climate models indicate that climate change and variability will be greatest at high latitudes, climate monitoring will be critical to understanding the changing conditions of park ecosystems. The NPS is planning a set of 18 grazing enclosures in Bering Land Bridge. The enclosures are designed to answer the questions:

1. What type and condition of tundra vegetation would occur in the absence of grazing in a variety of ecotypes?
2. How long does it take for a heavily grazed area to recover the abundance and diversity of lichens comparable to an ungrazed area?

Between 1999 and 2005, NPS conducted range studies in BELA culminating in a set of 78 long-term lichen monitoring plots. BELA's plots showed large differences in lichen biomass with sites outside BELA known to be heavily grazed. Unfortunately, the plots with known heavy grazing are in a maritime climate south of the Bendeleben and/or Kigluaik Mountains, unlike those inside of BELA.

The enclosures will assist NPS in understanding the changes in our long-term winter range monitoring plots by establishing a known endpoint on the

grazing spectrum. Enclosures are co-located with the existing monitoring plot network. Each 30 x 30 ft enclosure will contain 2 vegetation plots inside and 2 immediately adjacent. The plots outside the enclosure will be inside of the larger 1 acre lichen monitoring plot.

The enclosure plots are very quantitatively rigorous point count plots designed to detect even subtle differences between grazed and ungrazed conditions. Enclosures are placed in a broad spectrum of ecological types from alpine to lowland in order to characterize the differences in grazing effects and recovery time in different places on the landscape. Scientific literature is sparse on long-term recovery of lichens following heavy grazing, and it generally applies only to lowland, mixed lichen ecotypes. NPS's array of enclosures compares grazed to ungrazed plant communities along the full continuum of BELA's ecological zones. NPS plans to maintain these enclosures for a minimum of 30 years.

Qamani Publication

Bering Land Bridge National Preserve is working the Eileen Devinney of the NPS Regional Office to complete a publication on Inupiat place names for Shishmaref called Qamani Place Names, Localities and Site Descriptions. This project was originally begun by the late Edgar Ningeulook who worked for the park until 1997 and Dr. Susan Fair who passed in 2003. Qamani means "up the coast..." but it also means "inside" (in a place one cannot see), so it is indeed true that the word also may carry connotations of "in the heart or mind." Others who worked on this project were the late: Gideon Kahlook Kunautaq Barr, Sr., Bessie Barr Cross, Ray, Hattie and Jack Herman Ningeulook, Fannie Kigrook Barr, Alex and Elsie Weyiouanna, Kara Aghupuk, Walter Nayokpuk and Reila Okpowruk. Also, Morris Kiyutelluk, Harvey Pootoogooluk, and Levi A. Mills, Sr. have also worked on this project. The park hopes to have this publication reviewed in February 2013.

Serpentine Hot Spring Site Management Plan Underway

The Serpentine Hot Springs Site Management Plan project scoping with Regional office and Nome park staff has begun. A series of initial public meetings were done in Shishmaref, Wales, Deering, Nome and Kotzebue in 2011-2012. Based on community comments from these meetings, a range of alternatives was created. Public meetings were done in Nome and Shishmaref to review these alternatives as well as a call for comments online and through Facebook. Further meetings will be done to identify the preferred alternative and to discuss commercial services and potential flooding issues at the hot springs. The site management plan is expected to take another year to complete. The park will utilize in-person public meetings, Facebook and the internet to obtain comments. This project will provide needed direction for managing the Serpentine area.

Geothermal Investigations at Serpentine Hot Springs

Additional hydrological testing was conducted at Serpentine and Arctic Hot Springs in 2011 as part of the "Geothermal Investigations" project. The overarching project goals are to characterize the hydrology, geochemistry, water quality, and microbiology of Serpentine area water resources.

This year's goals were to obtain more information on discharge levels and patterns, water quality and helium isotopes (to investigate whether a hidden magma source is present). The NPS continues to collaborate with researchers from USGS and Montana State University. A final draft of overall findings is prepared and will be ready for peer review shortly. Once reviewed, results will be shared with public. Project Lead: Linda Hasselbach, NPS

Kividlo Cabin (Cowpack Shelter Cabin) Environmental Assessment and Construction at Cowpack Lagoon

This project is on hold due to lack of funding to complete both the environmental assessment



and construction. This year, park staff applied for Transportation dollars to complete an Environmental Assessment of the Cowpack site, construct the replacement shelter cabin, and install tripod trail stakes from Shishmaref to the new cabin to Cape Espensberg. In 2009, BELA shipped 2 conex vans of construction materials for the rebuilding of the cabin and is leasing property next to the airport. In 2009, BELA had two meetings with the Native Village of Shishmaref, Shishmaref Native Corp, and the Shishmaref Emergency Services about the new location of the cabin at Cowpack Lagoon, building logistics and rebuilding of the cabin. An archaeological assessment was completed in July of 2009. The park applied for Transportation funding in 2012 and is hoping to receive funding in 2014 or 2015.

Big Game Guiding Environmental Assessment (EA) Complete

The Preserve received funding to conduct an environmental assessment of big game guiding, the EA is complete and comments were received in November 2012. The NPS is working to answer the comments received. The NPS preferred alternative is *Alternative C: Award up to three Guided Hunting Contracts for Separate Guide Areas in the Preserve (NPS Preferred Alternative)*.

Under this alternative, the NPS would issue a prospectus to solicit offers for up to three guided hunting services with each guide operating in separate areas within the Preserve. One concessioner would be authorized to guide up to 10 clients each year in unit 22E (Guide Use Area 22-01), and the other one or two concessioner(s) would be limited to up to 10 clients each year in the remaining Guide Areas within the preserve: 22-03, 22-06, and 23-07. This alternative would provide for an average of 20 clients annually, or up to 200 clients over the ten-year contract period.

Beringia Projects Funded for 2013

In 2013, four new projects will be funded by the National Park Service's Shared Beringian Heritage Program (SBHP). This year, the SBHP took steps to reach new audiences, namely the residents of rural Beringian communities. The application was streamlined and made more accessible to those not familiar with the grant-writing process, and some new pre-submission elements were added in order to assist in answering questions and addressing concerns from the applicants. Workshops and outreach were done at gatherings in the region, and local park staff at Bering Land Bridge National Preserve and Western Arctic Parklands aided the program in disseminating information in local communities. The Beringia Program received specific and valuable feedback on the new application, and will continue to improve the format and address concerns about accessibility. Following the "Call for Proposals" announced in April, 2012, the Beringia Program received a total of 16 proposals that encompassed a wide range of interests and spanned geographical Beringia. The proposals were submitted in August, and went through a comprehensive internal review by subject-matter experts from a range of disciplines



Hunters carry on the tradition of marine mammal harvest throughout Beringia. Photo courtesy of Konstantin Savva

and departments at the National Park Service (NPS), the State of Alaska, and other participating organizations.

Following the internal review, members of the Beringia Panel met in late October. The Panel, made up of representatives from the NPS Regional Office, the Bering Land Bridge National Preserve, Bering Straits Regional Corporation, NANA, and the Arctic Slope Regional Corporation, evaluated the proposals prior to recommending four projects to the Program Manager for funding in 2013. Their deliberations and final decisions were based on the amount of funding available in 2013, the comments from the anonymous internal reviewers, and their own considerations as to which projects would most benefit the Beringia region in both Alaska and Russia.

The following projects have been chosen for funding by Program Manager Janis Kozlowski. All meet the necessary requirements: they are compatible with the stated goals of the Beringia Program, and contain an appropriate level of involvement from across the Bering Strait in Russia:

1. ***Ice Bridge: Profiles from Beringia*** - Sitka Sound Science Center Ice Bridge is a series of radio and audio slideshow profiles about extraordinary and ordinary people who live and work within the central Beringian region. This project will tell stories of conflict, adaptation and success in an effort to foster better communication and innovation, and to promote education and protection. The primary goal is to link those who live within the region with each other through compelling profiles and an interactive website.
2. ***Beringian Messenger Network: Institute of the North*** - Developing and strengthening effective communication systems will be the hallmark of this program, beginning at the community level and growing to incorporate regional and cross-border components. The Beringian Messenger Network will evaluate and contribute a facilitative framework to the existing communication systems, while fostering inter- and intra-community, as well as

cross-border, relationships.

3. ***Diomed Island Family Reunification Visit: Native Village of Diomed*** - As elders on both sides of the Bering Strait age and die, the ties and shared cultural heritage between the Native Village of Diomed and their relatives in Chukotka diminish. The Tribal Council of the Native Village of Diomed has resolved to undertake reunification visits as a means to renew family ties, especially between members of the younger generations, and thereby preserve shared culture and traditions of language, dance, crafts, and subsistence.
4. ***The Great Beringian Knowledge Exchange: Native Village of Mekoryuk*** - The project's main goal is to set up a significant and energizing exchange of Native reindeer herders, Youth, Elders and experts between Chukotka and Alaska. This exchange will be organized by the Native Village of Mekoryuk through its cooperation with three partner Chukotka organizations. This project is based on reindeer herding, an age-old tradition of the people of Beringia. It was one of the first modern cross-border projects for Beringia which began in the 19th Century and promises to be the key to Native resiliency and sustainability in the future.

The Beringia Program looks forward to working with the cooperators on these exciting and inspiring projects in 2013.

For More Information or questions about these projects, please call, email or write:

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